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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,919	07/25/2001	Takashi Kitade	L9289.01160	3019

7590 12/14/2005

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EXAMINER

DAVIS, CYNTHIA L

ART UNIT PAPER NUMBER

2665

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/889,919

Applicant(s)

KITADE ET AL.

Examiner

Cynthia L. Davis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11/22/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 10-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, filed 11/22/2005, with respect to the rejection(s) of claim(s) 10 and 14 under 35 USC 103(a), have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of 35 USC 103(a).

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano (5933783) in view of the admitted prior art, Nagano (6011980), and Zehavi (5757767).

Regarding claim 10, a plurality of despreaders corresponding to the plurality of received transmission signals that each despread the corresponding received transmission signal with the respective spreading code sequence is disclosed in Nakano, figure 11, elements 19a and 19b. A measurer that measures the reception power of each despread signal is disclosed in Nakano, column 7, lines 58-64, and figure 11, elements 33 and 35 (the SIR and BER are indicators of power level). A combiner that combines the measured reception powers of the despread signals to obtain a combined reception power is disclosed in column 7, lines 46-49 and 61-64, and figure 11, element 35 (the BER detector, which is an indicator of power level, is attached to an output of the combining unit, figure 11, element 21). That the signal portion measured is the midamble is missing from Nakano. However, applicant admits on page

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10, lines 20-24, of the instant specification, that a reception power measuring section generally measure reception of a known signal portion, such as a midamble. It would have been obvious to one skilled in the art at the time of the invention to measure the midamble. The motivation would be to measure a known signal portion. A transmission power controller that controls an uplink transmission power is disclosed in Nakano, figure 11, element 31, and column 7, lines 58-64. That the power is controlled according to a propagation loss, which is the difference between the transmission power used by the base station apparatus to transmit the transmission signals and the combined reception power is missing from Nakano. However, Nagano discloses in column 1, lines 46-50, a system that controls the uplink based on the propagation loss in the down link channel. It would have been obvious to one skilled in the art at the time of the invention to use the power control method of Nagano in the system of Nakano. The motivation would be to use a transmission power control system from a conventional CDMA system (Nagano, column 1, lines 40-43). That the transmission signals that are processed are transmitted in parallel by separate antennas of the same base station is missing from Nakano. However, Zehavi discloses in column 2, lines 43-44, that systems may achieve path diversity by deliberately transmitting using multiple antennas. It would have been obvious to one skilled in the art at the time of the invention to use multiple transmission antennas in the system of Nakano. The motivation would be to reduce effects of fading (Zehavi, column 2, lines 22-26).

Regarding claim 14, despreading each received transmission signal with the respective spreading code sequence is disclosed in Nakano, figure 11, elements 19a

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and 19b. Measuring the reception power of each despread signal is disclosed in Nakano, column 7, lines 58-64, and figure 11, elements 33 and 35 (the SIR and BER are indicators of power level). Combining the measured reception powers of the despread signals to obtain a combined reception power is disclosed in column 7, lines 46-49 and 61-64, and figure 11, element 35 (the BER detector, which is an indicator of power level, is attached to an output of the combining unit, figure 11, element 21). That the signal portion measured is the midamble is missing from Nakano. However, applicant admits on page 10, lines 20-24, of the instant specification, that a reception power measuring section generally measure reception of a known signal portion, such as a midamble. It would have been obvious to one skilled in the art at the time of the invention to measure the midamble. The motivation would be to measure a known signal portion. Controlling an uplink transmission power is disclosed in Nakano, figure 11, element 31, and column 7, lines 58-64. That the power is controlled according to a propagation loss, which is the difference between the transmission power used by the base station apparatus to transmit the transmission signals and the combined reception power is missing from Nakano. However, Nagano discloses in column 1, lines 46-50, a system that controls the uplink based on the propagation loss in the down link channel. It would have been obvious to one skilled in the art at the time of the invention to use the power control method of Nagano in the system of Nakano. The motivation would be to use a transmission power control system from a conventional CDMA system (Nagano, column 1, lines 40-43). That the transmission signals that are processed are transmitted in parallel by separate antennas of the same base station is missing from

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Nakano. However, Zehavi discloses in column 2, lines 43-44, that systems may achieve path diversity by deliberately transmitting using multiple antennas. It would have been obvious to one skilled in the art at the time of the invention to use multiple transmission antennas in the system of Nakano. The motivation would be to reduce effects of fading (Zehavi, column 2, lines 22-26).

Regarding claims 11 and 15, the transmission signals are common control channel signals is disclosed in Nakano, figure 23 and column 5, lines 15-17 (disclosing measuring the SIR of the perch, or control, channel).

Regarding claim 13 and 17, the transmission power controller controls the uplink transmission power to have a value obtained by adding the interference power at the base station apparatus and a predetermined constant to the propagation loss is missing from Nakano. However, Nagano discloses in column 2, line 63-column 2, line 2, a BST that measures received signal strength (which is related both to interference and to propagation loss) and uses that measurement to indicate to the mobile whether to adjust the transmission power at the mobile with a 1 db pitch, this uses a relationship between the interference power at the base station, a constant, and the propagation loss. It would have been obvious to one skilled in the art at the time of the invention to use the power control method of Nagano in the system of Nakano. The motivation would be to use a transmission power control system from a conventional CDMA system (Nagano, column 1, lines 40-43).

3. Claims 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano in view of the prior art as admitted by applicant in the specification,

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Nagano, and Zehavi, in further view of Ostman. The uplink transmission power is the transmission power of a dedicated channel signal is missing from Nakano. However, Ostman discloses in column 2, lines 66-67, that a dedicated channel is typically provided in the uplink of a CDMA system. It would have been obvious to one skilled in the art at the time of the invention to power control a dedicated channel. The motivation would be to power control a typically present channel in a CDMA system.

### ***Conclusion***

Applicant's amendment dated 7/7/2005 necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia L. Davis whose telephone number is (571) 272-3117. The examiner can normally be reached on 8:30 to 6, Monday to Thursday.

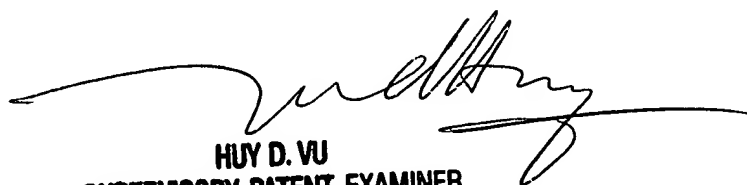
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CLD  
12/2/2005

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**HUY D. VU**  
**SUPERVISORY PATENT EXAMINER**  
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